

IN THE SPECIFICATION:

On page 1, after the last line, please insert the following paragraphs:

According to the invention, the drive system for the motor vehicle includes two DC electric series motors coupled mechanically to rotate together and coupled mechanically to the drive wheels of the motor vehicle. Each of these motors has a pair of electrical power terminals. The drive system further includes an electric switch for electrically connecting DC input power leads L1 and L2 to the pairs of power terminals of the two motors. When in a first mode, the switch connects the power terminals of the two motors in series between the power leads L1 and L2. When in a second mode, the switch connects the power terminals of the two motors in parallel between the power leads L1 and L2. The two motors thus operate in a low speed range when the switch is in the first mode and in a higher speed range when the switch is in the second mode.

In addition, one or both of the two motors has an electric shunt field winding and the switch is operable, when in a third mode, to connect the shunt field winding of

one or both motors to the power leads L1 and L2. When in this third mode, one or both motors operate in still another speed range, which may be higher than the speed ranges of the first and second modes.

On page 2, in the paragraph describing Fig. 2 (submitted in applicant's Amendment filed July 7, 2004), please amend this paragraph to read as follows:

Fig. 2 shows a second embodiment of a motor vehicle in rear view with two motors connected to the vehicle rear axles.

On page 3, lines 5-19 to the end of the specification, please amend the text to read as follows:

Fig. 1 shows two motors ~~{M1}~~ and ~~{M2}~~ mounted and hooked-up in tandem with three connecting plates ~~{4,5,6}~~ and a mounting channel ~~{7}~~ common to both motors ~~1 and 2~~ and the ~~quick~~ a plurality of quickly removable and exchangeable batteries ~~{3}~~ mounted above the motors. This view indicates a two wheel and four wheel drive configuration by adjustments to the manually adjustable plates ~~{4,6}~~. Fig. 2

shows two motors M1 and M2 mounted in tandem with an axle shaft and ~~three~~ one connecting plates ~~(4,5,6)~~ plate 5. Two banks of batteries ~~(3)~~ are mounted on a supporting channel 7 bolted directly to the chassis of the vehicle. A solar panel ~~(8)~~ is shown on top of the roof of the vehicle.

Fig. 3 is a schematic of the control system ~~setting~~ starting with the rectifier ~~(9)~~ connected by a polarized receptacle ~~(14)~~ with a polarized cap ~~(15)~~. A The solar panel ~~(8)~~ is shown hard wire connected ~~by Bus~~ to a power bus L1 and L2 which interconnects the batteries 3, and a ~~selector switch (10), which connects into the a~~ fuel cell system (13), a power switch 11, transition relay (17) and a ~~forward-reverse switch (16)~~ 12 and a transition relay 16. The ~~quick~~ quickly removable batteries 3 in Fig. 1 mounted above the motors plug and lock into a the power bus to facilitate quick removal at exchange stations in exchange for fully charged batteries and/or hydrogen tanks (not shown) in connection with the fuel cell system 13.

A selector switch 10 operates through an electrical control unit to open and close a plurality of motor contactors in accordance with the program shown in Fig. 4. These contactors, 17-23, are connected between the power bus

lines L1 and L2 and the series motors M1 and M2 in the manner shown in Fig. 5.

As may be seen in Fig. 5, the two series motors are connected in series for low speed operation and in parallel for medium speed operation. For high speed operation, the motors remain connected in parallel and power is applied to shunt fields of one or both motors turning them into compound motors. The speed range -- low, medium, high -- may be selected automatically by means of the transition relay 16 or manually by means of the selector switch 10.

Sequence of Manual Operation

Position 1

The closing of the two pole switch L1-L2 11, and placing the selector switch 10 in the manual "low" position will cause motor ~~contractors~~ contactors 17-21 ~~M1 and M2~~ to become energized ~~through the normally closed (N.C.) interlocks 1, 3 and 5,~~ as shown in Fig. 5, position 1, hence the two series motors M1 and M2 are connected in a series connection.

Position 2

To reach a higher medium speed from the ~~number~~ 1 lower speed position, ~~move~~ the selector switch 10 is moved to the

"medium" speed position re-energizing motor ~~contractors~~
~~contactors 17-21 M1 and M2 through the normally closed~~
~~interlocks 6 and 10 and the normally open interlocks 7 and 9~~
as shown in Fig. 5, position 2, hence the two series motors
connected in parallel.

Position 3

To reach a higher speed, from the medium speed
position, the selector switch 10 is moved to the "high"
position, as shown in Fig. 5, position 3, ~~re-energizing~~
~~motor contractors M1 and M2 through the following normally~~
~~closed interlocks: 1, 14 and 16; and, the following normally~~
~~open interlocks 12, 13, 15 and 17, and energizing the shunt~~
fields in both motors M1 and M2 thus changing these two
series motors to compound motors which remain in a parallel
connection.

There has thus been shown and described a novel all
electric power motor vehicle and battery and fuel tank
exchange system which fulfills all the objects and
advantages sought therefor. Many changes, modifications,
variations and other uses and applications of the subject
invention will, however, become apparent to those skilled in
the art after considering this specification and the

accompanying drawings which disclose the preferred
embodiments thereof. All such changes, modifications,
variations and other uses and applications which do not
depart from the spirit and scope of the invention are deemed
to be covered by the invention, which is to be limited only
by the claims which follow.